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7415/CMP/CMP/RKK**REMARKS**

Claims 1 to 27 are currently pending. Claims 1, 17, 23, and 27 are the only pending independent claims.

**Allowable Subject Matter**

The Applicants thank the Examiner for indicating that Claims 17 to 22 are allowable. In addition, the Applicants thank the Examiner for indicating that Claims 3, 7 to 12, 16, and 26 include allowable subject matter. As will be detailed below, Applicants assert that Claims 1 and 23, the base claims from which Claims 3, 7 to 12, 16, and 26 respectively depend, also recite allowable subject matter. Accordingly, the Applicants decline to amend Claims 3, 7 to 12, 16, and 26 to incorporate the features of the base claim from which they depend and any intervening claims, at this time.

**Prior Art Rejection under 35 U.S.C. § 102(e)**

The Office Action rejected Claims 1, 2, 4 to 6, 13 to 15, 23 to 25, and 27 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,760,976 to *Martinson et al.* (hereinafter "*Martinson*"). The Applicants respectfully traverse the rejection. As will be detailed below, Applicants assert that Claims 1, 2, 4 to 6, 13 to 15, 23 to 25, and 27 are patentable over the cited reference.

Applicants assert that *Martinson* cannot anticipate Applicants' invention because *Martinson* is only concerned with centering a specific wafer to correct individual wafer offset errors. In contrast, Applicants'

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invention is directed to calibrating a substrate handling robot itself, not the position of a particular substrate. Thus, Martinson does not contemplate the problems solved by Applicants' invention.

More specifically, Claim 1 recites a method comprising, among other features, placing a calibration fixture in a substrate placement location where "the calibration fixture include[es] at least one sensor." The Applicants submit that Martinson does not disclose a calibration fixture including a sensor. Instead, Martinson discloses placing a paddle with a "calibration fixture" (e.g., a hole or solid feature) in a process station where the process station includes a sensor. (This is done as part of a process for locating the position of the process station's sensor.) Martinson does not disclose a paddle or calibration fixture with a sensor. Instead, the process station has a sensor, which is the opposite of the recitation of Claim 1. The passage relied upon by the examiner describes using the process station's sensor to detect a wafer position. Clearly the wafer does not include a sensor and thus the relied upon passage does not anticipate Applicants' invention.

In addition, Claim 1 recites causing an end effector of a robot "to interact with the at least one sensor." Martinson does not disclose either an end effector or a robot which interacts with a sensor. While Martinson does disclose a robot arm 10, no where does Martinson disclose that the robot arm 10 interacts with a sensor. Instead, Martinson discloses that a wafer or a paddle activates the sensor of the process station. Thus,

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*Martinson* does not disclose at least this feature of Claim 1.

Moreover, Claim 1 recites that based on the interaction between the end effector and the sensor, "determining calibration data for the substrate handling robot." As detailed above, *Martinson* does not disclose an end effector that interacts with a sensor. Therefore, *Martinson* cannot disclose determining calibration data for a substrate handling robot based on an interaction between an end effector and a sensor as recited in Claim 1. For all the reasons noted above, the Applicants respectfully submit that Claim 1 is patentable over *Martinson* and request that the rejection be withdrawn. Similarly, Claims 2, 4 to 6, and 13 to 15, which depend from Claim 1, are patentable for at least the same reasons.

Claim 23 recites an apparatus for use during calibration of a substrate handling robot which comprises, among other features, a body shaped to fit a substrate placement location where "at least one sensor [is] mounted in the body." As indicated above, *Martinson* does not disclose such a feature.

In addition, Claim 23 recites that "the at least one sensor [is] adapted to generate calibration data for a substrate handling robot during calibration of the substrate handling robot." As outlined above, *Martinson* does not disclose a sensor which is used to calibrate a robot. Furthermore, *Martinson* does not disclose calibrating a robot. Thus, *Martinson* does not disclose all the features recited in claim 23 and the Applicants respectfully request that the rejection be withdrawn.

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Likewise, claims 24 and 25, which depend from claim 23, are patentable for at least the same reasons.

Claim 27 recites a system comprising, among other features, "a calibration fixture which includes a body shaped to fit a substrate placement location and at least one sensor mounted in the body." In addition, claim 27 recites a controller operative to "cause an end effector of the substrate handling robot to interact with the at least one sensor." As discussed above, *Martinson* does not disclose either of these features.

Claim 27 also recites that the controller is operative to "determine hand-off location data for the substrate handling robot based on signals output from the at least one sensor." *Martinson* does not disclose this feature. As indicated above, *Martinson* does not disclose that the robot arm 10 interacts with the sensor of the process station. Thus, it follows that *Martinson* cannot disclose determining hand-off location data for a substrate handling robot based on signals output from a sensor when an end effector interacts with the sensor. Therefore, claim 27 is patentable over the cited reference and the Applicants respectfully request that the rejection be withdrawn.

#### **Conclusion**

The Applicants believe all the pending claims are allowable and respectfully request reconsideration and allowance of the same.

A separate Request for Extension of Time is included herewith. If any additional time is required,

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please accept this paragraph as a request for such an Extension of Time and authorization to charge the requisite extension fee to Deposit Account No. 04-1696.

The Applicants do not believe any other fees are due regarding this amendment. If any other fees are required, however, please charge Deposit Account No. 04-1696.

The Applicants encourage the Examiner to telephone the Applicants' attorney should any issues remain.

Respectfully submitted,



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